3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

A consolidating factor, (I. g.) the development of an external market for small quantities of agricultural produce, is probably the most recent step to date in the increasing scale of agriculture. Even without trade, agriculture would likely have come to be practiced on nearly as large a scale as at the present time. Being able to trade small amounts of their corn and beans, and a few other crops, to the whites for white goods has merely further established the feasibility of agriculture as an adjustment to the new conditions the Cayuá face. Certain aspects of their culture other than farming may conceivably diminish through the gradual inculcation of Neo-Brazilian values in coming generations of Cayuá. Agriculture, however, at least as long as the present situation prevails, will be favored and enhanced by the very factors of acculturation.

Three other factors have aided the growth of Cayuá agriculture to a lesser degree, or indirectly. The decrease in game animals in the Cayuá region (I. d.) has had the effect of making agriculture as a source of daily bread somewhat more important through the consequent decline of hunting. The introduction of trade goods and of trading posts (I. e.) has tended further to establish the importance of agriculture. The Cayuá now know and desire trade goods, and one means of satisfying the desire is through trading agricultural produce for these goods. The development of an external market for Cayuá (male) labor, (I. g.), has perhaps also had some effect in solidifying Cayuá agriculture (though in some respects it has competed with agriculture). The type of work for which Neo-Brazilians employ Cayuá men in change is usually agricultural. Moreover, it is specifically the same type of agriculture as that practiced by the Cayuá themselves. As far as operations, at least, are concerned, wage-work provides little or no alternative or change from own production and may have the reinforcing effect suggested.

II. A. b. "Hunting and gathering activities decrease in importance in the total economy." One acculturational cause of the decline of hunting and gathering activities has been (I. c.), the gradual and increasing territorial restriction of the Cayuá and their ultimate settlement on small reservations. Possibly this restriction was not drastic for settlement, as the Cayuá aboriginally were somewhat sedentary and built fairly substantial shelters that must have tended to confine their range. But nowadays, with legally defined possession of lands, it is not so easy as formerly to traverse the countryside for hunting and gathering without trespassing on the property of white settlers who object. The Cayuá reservations, furthermore—or at least those of some groups—are not near principal watercourses where there is access to canoe travel. Hence the people can no longer participate in such hunting and fishing activity as former mobility with the canoe presumably permitted.

The second main cause of decrease in hunting and fishing is (I. d.), the reduction of the aboriginal supply of game animals. This has occurred because of

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4

*177 182 648 • 22 the presence of many more people in the region, principally whites, who have more efficient hunting techniques. The whites also graze considerable numbers of cattle. Inevitably the ecological balance has shifted to the disfavor of the wild animals. Hunting has become less possible because there is less to hunt. Precisely what the presence of domesticated grazing animals in large numbers may have meant to the prospects of plant gathering, on the other hand, is not quite certain. In a region like the intermontane area of North America gathering, rather than hunting, was of primary importance, and the wild plants gathered were such as to be accessible and edible to grazing animals. The outcome of the introduction of livestock in that instance was both predictable and serious for the aborigines. But many of the wild plants gathered by the Cayuá are tree-growing fruits; many lower growing varieties are plants of the forest where cattle are not so apt to graze. It may consequently be doubted that cattle have had a great deal to do with any decrease in plant gathering activities of the Cayuá.[156]

*177 182 241 22 Broadly and indirectly significant in the declining importance of hunting and fishing (and gathering?) has been the increase in scale of agriculture, (II. A. a.). These two large changes apparently stand in a fairly close inverse relationship to each other. As hunting and fishing decreased, agriculture increased, and to a certain extent one result can therefore be said to have been a cause of the other, though of course we are dealing here with no "closed" causal system. Had there been no feasible alternative to the dependence upon hunting and fishing, such as agriculture, it may be doubted that they would as readily have given way before acculturational forces operating against them—or the present economic situation of the Cayuá might not have been such a relatively well adjusted one. In this sense, then, factors ultimately favorable to agriculture have indirectly contributed to the deterioration of non-agricultural food technologies; and conversely, factors unfavorable to hunting, fishing, and possibly gathering, have indirectly contributed to the modern importance of agriculture to the Cayuá.[157]

*177 182 241 412 II. A. c. "Greater present technological efficiency and productivity of the individual worker in agriculture. It is possible not only for more agricultural

[156] The cattle, and in a few cases swine, present something of a problem to the Cayuá agricultor, however. Those living near open country where cattle graze must make the trails to their *kokué* obscure and difficult and must build gates or other barricades. Otherwise the cattle may invade the plantations and cause large scale depredations, as certain wild animals always have done. The latter, however, may be trapped and killed whereas the cattle of the Neo-Brazilians may not.

[411] [157] An instance in which this has not been wholly true, however, is that of the introduction of metal implements. The machete has developed into one of the most commonly employed hunting weapons for certain small game such as armadilloes, substituting for the club, reported by some authorities as in use by the aboriginal Cayuá. At the same time time, of course, the machete has been a notable factor in enhancing larger scale agriculture.

/309 cont./

174 If they were under the authority of a powerful chief, the expedition
167 gained in cohesion and numbers. In no case must one see in
721 these migrations a national movement carried out according to
619 a pre-established plan and involving the whole group of Guarani tribes simultaneously. These Indians, like all in tropical America, have never had a very clear consciousness of their unity, and, even in the face of a common danger, the idea never occurred to them that similarity of language and culture might create a bond of solidarity among them. All the more reason why this individualism of the group or tribe was to manifest itself with particular acuity when a simple pillaging expedition was afoot.

174 The columns of Guarani warriors who penetrated into
721 the Chaco bush doubtless included only a few women. The
167 men advanced, walking in single file, bows and arrows in hand,
22 while several girls followed behind with baskets full of pro-
262 visions on their backs. If these ran out, the men hunted along
[411] the way or fished in the rivers, such as the Pilcomayo if they
[482] were following its course. When game or fish were lacking, they gathered fruit; palm cabbage, algarroba pods, and chañar fruit were there, which provided a substantial diet, but it was still necessary to choose the season when they were
[825] ripe, in order to travel. They watched the flight of bees in order to find honey, and they did not scorn certain insects or
167 their larvae. The problem of water was the only serious one;
721 it was solved by collecting what the caraguatá leaves held at
174 the base; they sucked the root of certain tubers (the /310/
271 sipóy (1) of the northern Chaco) and quenched their thirst at
824
[137]

1. This is a Bignoniaceae or Begoniaceae (?). This plant has the appearance of a liana whose bulb is full of fresh water. (Diccionario Chiriguano-Español y Español-Chiriguano, p. 192).

the small ponds encountered on the way.

/310 cont./

167 174 72 [484] those routes would already have closed up again with forest and grass ..." /translated from the Spanish/.

From time to time there were skirmishes with the Guaikurú, Samuko /Zamuco/, or Matako /Mataco/ Indians, but for the Guarani, who for a long time had been used to fighting the wild Indians of the Chaco, these combats did not take them by surprise. They contented themselves by attracting the least possible attention by avoiding setting fire to the bush or simply making too much smoke.

167 174 175 127 None of the details I have just given is the fruit of my fancy. In order to describe these migrations it has been enough to recall the scenes I witnessed among the descendants of these ancient Guarani and to glean some facts from the chronicles or documents in which are recounted for us the crossings of the Chaco made by the Guarani before or during the Spanish conquest. Does anyone want some examples? I take them from the commentaries of Alvar Núñez Cabeza de Vaca and from the Relación de Domingo Martinez de Irala.

484 175 648

● 22 262 [127] /311/ This has to do with the entrada which Governor Alvar Nuñez Cabeza de Vaca made into the Chaco in search of a way to the country of the Chané. "The Guarani Indians whom the governor took along lived on what the Governor had them given out of the reserve provisions and on honey which they drew from the trees. They also procured some game for themselves by killing peccaries, tapirs, and deer, which seemed to be abundant in that land; nevertheless, since the band who came with him were numerous, they made noise and put the wild animals to flight, which made the hunting not very fruitful. Spaniards and Indians also ate the fruit of wild trees, of which there was a great quantity ... they took advantage likewise of the fruit of the palm trees which abound in this region. They do not eat dates, but are satisfied to break their pits. The inside [252] is round and like a sweet almond. The Indians make a flour of it, which is an excellent food; they also eat the palm cabbages, which are very good." (Hernández, p. 303.)